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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,046	02/05/2004	Philip R. Houston	BUSI-P01-001	5450
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ROPES & GRAY LLP PATENT DOCKETING 39/41 ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			EXAMINER McCORMICK, GABRIELLE A	
			ART UNIT 3629	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/773,046

**Applicant(s)**

HOUSTON, PHILIP R.

**Examiner**

Gabrielle McCormick

**Art Unit**

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of Claims***

1. This action is in reply to the Request for Continued Examination filed on October 19, 2009.
2. Claims 1-2, 6, 8-10 and 16 have been amended.
3. Claims 18-19 have been added.
4. Claims 1-19 are currently pending and have been examined.

### ***Continued Examination Under 37 CFR 1.114***

5. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 19, 2009 has been entered.

### ***Previous Requirement for Information Under 37 C.F.R. § 1.105***

6. Applicant and the assignee of this application were previously required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
7. In response, Applicant has reiterated that known and readily available documents and materials describing any product or service that incorporates the claimed subject matter for the time period beginning with the Spring of 2001 and continuing through February, 5, 2002 were submitted in the IDS of July 31, 2008.
8. Within Applicant's submissions was a letter dated February 26, 2002, from "Security Training, Inc." (STI) that discloses a "Deceptive Behavior Detection and Strategic Elicitation" course that was conducted prior to the date of the letter ("In addition to the core training program that was the

focus of our recent introductory session in New York (described in the enclosed materials)...” (pg. 1; para. 3). The enclosed material lists Philip R. Houston as the expert. It is presumed by the Examiner that Philip R. Houston is the same Philip Houston that is the inventor of the instant application, therefore, the Examiner requested that the Applicant provide the nature of the relationship of STI and BIA. Further, the Examiner expanded the request for information to include **all** course materials, written and video, (not just promotional excerpts) and the **dates** of **all** courses relating to deceptive behavior detection that were conducted prior to February 26, 2002. Additionally, please provide any training materials that were used to train financial, human resource, auditing and other key professionals (see pg. 1; para. 2 of the letter) to detect deceptive behavior.

9. Applicant responded that Security Training, Inc. was a previous name of BIA.
10. In Applicant's response dated October 19, 2009, Applicant submits that the previously submitted IDS includes all known and readily available course and training materials and the dates of all course relating to deceptive behavior detection that were conducted by Applicant prior to February 26, 2002.

### ***Previous Claim Rejections - 35 USC § 101***

11. Applicant has amended claim 1 to include “reviewing the record on the display with a processor to determine the presence of a cluster...” This amendment provides an activity tied to a particular machine and therefore the previous rejection is withdrawn.
12. The Examiner maintains that the act of displaying a record on a display is merely insignificant extra-solution activity. Additionally, though Applicant asserts that the annotator is a particular machine, the Examiner disagrees. P[0040-0041], page 16, discloses that the reviewer (i.e., a human being) notes the question and cluster information. The decisions regarding the annotations are made by the reviewer, not a particular machine, therefore the use of annotator

580 by the reviewer merely provides insignificant extra-solution activity as the reviewer performs the annotation by referencing a database of deceptive behaviors (page 20).

***Claim Rejections - 35 USC § 112***

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. Claims 1-19 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
15. Independent claims 1 and 6 have been amended to require a processor for analyzing the record to determine the presence of a cluster of deceptive behaviors responsive to a stimulus.
16. Page 19-20 of the specification states: *The optional detection process 600 may be a software process operating on a conventional computer system that is capable of reviewing the record stored in database 540 and determining the occurrence of possible deceptive behavior within the recorded disclosure. To this end, the detection process 600 may include a software process capable of analyzing the speech or text of a corporate disclosure and identifying within the speech or text certain trigger words that are indicative of deceptive behavior. In further optional embodiments, the detection process 600 may include a video processor that is capable of analyzing video data stored as part of the record. The video data may be analyzed to determine suspected indicia of deceptive behavior, such as sudden physical movements of the representative.*
17. It is presumed the applicant is relying on the embodiment directed to video data analysis for support for the amended claims 1 and 6 due to the need to tie the determination to a timing

element. It is clear that mere analysis of trigger words does not provide a timing element for determining clusters.

18. This limited recitation of the capabilities of the video processor is not sufficient to adequately describe the review of the displayed record to determine clusters of deceptive behaviors. As recited by the claims, the processor determines clusters of behavior based on inclusion or exclusion in time intervals, as well as whether a behavior is concurrent with another behavior in order to place it in a cluster. There is no disclosure for the video processor performing these actions, nor is there disclosure to support how the processor differentiates deceptive behaviors from non-deceptive behaviors. The disclosure only stipulates that the processor is capable of discerning sudden physical movements, although the process by which the processor determines such movements is not disclosed.
19. Claims 8 and 16 recite the limitation of detecting at least one deceptive behavior responsive to the stimulus that begins after the stimulus time interval and after the end of all prior deceptive behaviors included in the cluster of deceptive behaviors, wherein the detected deceptive behavior is excluded from the cluster of deceptive behaviors.
20. The specification is silent with regard to the detection of such a deceptive behavior and therefore does not provide support for explicitly detecting and subsequently excluding this type of deceptive behavior.
21. Page 4 of the specification states: *A cluster of deceptive behaviors may be understood to include, although not be limited to, a group of at least two deceptive behaviors that begins between the beginning of a stimulus and up to about five seconds after the end of the stimulus and then continues uninterrupted. Only one of the behaviors need begin during this time period. All deceptive behaviors that occur continuously, or concurrently, with or after the first deceptive behavior are counted as separate deceptive behaviors.*
22. There is no disclosure for the detection of deceptive behaviors that occur other than as described above.

23. Claims 18 and 19 recite the limitation of comparing two records on a display, wherein consistent deceptive information is identified based on the comparison.
24. Though P[0044] (page 17) of the specification states that notes from different disclosures may be used to identify consistent deceptive behavior, there is no support for the narrower limitation of displaying the two records on a display.

### ***Claim Rejections - 35 USC § 103***

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. **Claims 1-10, 12-16 and 18-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Al Bandar et al. (US Pub. No. 2004/0181145, hereinafter referred to as "Al Bandar") in view of Black et al. (Us Pat. No. 5,802,220, hereinafter referred to as "Black"), in view of Greenfield ("It's Illegal to Lie to Stockholders, but Not to Employees; [Metro Final Edition]", The Sacramento Bee. Sacramento, Calif.: Jul 6, 1998, pg. B.5).
27. **Claims 1, 6 and 12-13:** Al Bandar discloses
- A record of a disclosure on a display; (P[0112] and P[0114])
  - A processor for analyzing the record to determine the presence of a cluster of deceptive behaviors responsive to a stimulus; (P[0022-0026]: analysis is performed automatically using a machine; P[0029]: channels are coded by behavior; P[0034]: channels are analyzed to determine deceptive behavior; P[0067]: channel data is grouped (i.e., a cluster is determined) to make a decision about behavioral states.
  - Clusters include data that begins during a stimulus time interval and a predetermined time after stimulus termination. (P[P[0064]: data collated over fixed (i.e., predetermined) length of

- time) and behaviors that begin after the time interval and before the end of a prior deceptive behavior (P[0081]: grouped data includes a current frame and previous frames; P[0099]: slow and fleeting behaviors occur concurrently and P[0134]).
- Annotation of the record to indicate the presence of a cluster including a reference to each type of deceptive behavior, wherein the types of behaviors are retrieved from a database; (P[0013]: frames are coded manually and P[0009]: coding comprises a record of whether a particular behavior took place and opinion of the judge; P[0011]: patterns are detected that indicate behavioral state; P[0024-0025]: automatic coding, therefore the database retrieval is inherent)
28. The Examiner notes that the content of the annotation is **nonfunctional descriptive data** and is not functionally involved in the steps recited. **The annotation of the record would be performed regardless of the descriptive content of the annotation.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
29. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included annotations that includes the type of behavior, the numbers of behaviors within a cluster of behavior, the stimulus, subject of the stimulus and the reply because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of annotation data does not patentably distinguish the claimed invention.
30. Al Bandar does not disclose excluding deceptive behaviors that begin after the time interval and are not concurrent with prior behaviors.
31. Black, however, discloses determining whether two expressions have been detected and if they do not overlap, the current (i.e., the first) expression is outputted, thus the non-overlapping expression is not included in the cluster. (C23; L1-10 and Fig. 12).
32. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have excluded non-overlapping expressions, as disclosed by Black, in the system of Al Bandar



for the motivation of improving the distinction between the detection of various expressions. It is obvious to exclude non-current data when determining deceptive vs. truthful behavior in order to more accurately categorize which behaviors were produced as a result of a given answer or part of an answer. AI Bandar discloses classifying to detect deception periods and whether the whole interview was generally deceptive. (AI Bandar; P[0136]). Therefore, it's obvious to accurately categorize behavior data by excluding non-overlapping data in order to detect the deceptive periods (i.e., the parts of an answer period).

33. AI Bandar does not disclose a corporate disclosure or the performance of an entity associated with the representative.
34. Greenfield, however, discloses that federal law requires honesty with regard to communications with shareholders (pg. 1; para. 4) and if the corporation misrepresents itself, investors are entitled to sue (pg. 2; para. 5).
35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included corporate communications, as disclosed by Greenfield in the system disclosed by AI Bandar, for the motivation of providing a method of determining truthfulness of corporate executives during the course of a law suit.
36. The Examiner notes that the type and content of disclosure is **nonfunctional descriptive data** and are not functionally involved in the steps recited. **The detection of deception behavior would be performed regardless of the nature of the disclosure analyzed.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
37. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included corporate disclosures because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of a type of data analyzed does not patentably distinguish the claimed invention.

38. **Claims 2-5:** Al Bandar discloses questions posed and subdividing the disclosure into time periods (P[0095]) and reviewing the record for pre-determined non-verbal responses (P[0057]).
39. **Claim 7:** Al Bandar discloses a pre-determined period of time (P[0064]) and collecting data the time that relates to the specific answer to a question (i.e., time after the stimulus ends) (P[0095]) but does not disclose 5 seconds.
40. Though Al Bandar does not disclose approximately 5 seconds, this difference is only found in the **nonfunctional descriptive data** and is not functionally involved in the steps recited. **The review of the behavior (i.e., data collection) would be performed regardless of length of the time period.** Thus, this descriptive data will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
41. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included five seconds because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the length of the time interval does not patentably distinguish the claimed invention.
42. **Claims 8 and 16:** Al Bandar detecting a deceptive behavior that is excluded from the cluster of deceptive behaviors. (P[0136]: deception periods are detected; P[0137]: classification over a length of an answer; and P[0138]: some time periods were classified as deceptive and others as truthful). by performing the classification in either time period or answer to question segments, deceptive behaviors are excluded from one time period or one question (and therefore the cluster of data that corresponds to the given time period or answer).
43. **Claims 9 and 10:** Al Bandar discloses clusters of the same behaviors (P[0087]: group data for one channel (i.e., one behavior) and different behaviors (P[0098]: a vector is produced that represents all channel statistics).
44. **Claims 14 and 15:** Al Bandar discloses questions posed and answers (i.e. statement made). (P[0095]).

45. **Claims 18 and 19:** Al Bandar discloses obtaining a second disclosure (P[0110-0111]). It is obvious that the reviewing and annotating, as discussed above with respect to claims 1 and 6 would be performed for the second disclosure. Though Al Bandar does not explicitly disclose performing a comparison of the two records, the Examiner takes **Official Notice** that it is old and well known to compare records for consistent information.
46. For example, suspects are interviewed during an investigation of a crime. It is old and well known to video record such interviews. Therefore, any and all interviews that undergo Al Bandar's deception analysis system would produce results that indicate truthfulness or deception resulting from the behavioral responses to the questions. It is obvious for an investigator to compare the results of the interviews in order to further the investigation.
47. **Claims 11 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Al Bandar et al. (US Pub. No. 2004/0181145, hereinafter referred to as "Al Bandar") in view of Black et al. (US Pat. No. 5,802,220, hereinafter referred to as "Black"), in view of Greenfield ("It's Illegal to Lie to Stockholders, but Not to Employees; [Metro Final Edition]", The Sacramento Bee. Sacramento, Calif.: Jul 6, 1998, pg. B.5) in view of Johnson, JR. (US Pub. No. 2002/0062089, hereinafter referred to as "Johnson").
48. **Claims 11 and 17:** Al Bandar does not disclose indicating a likelihood of deception based on the number of deceptive behaviors in a cluster.
49. Johnson, however, discloses computing a ranges of scores based on the number of markers for indicating probable deception, probable truth and indeterminate. (P[0092]).
50. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included indicating a likelihood of deception based on the number of behaviors, as disclosed by Johnson, in the system of Al Bandar for the motivation of correlating the behavior data to a summary indicator of deception to allow quick identification of a subject's responses with regard to overall deception.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabrielle McCormick whose telephone number is (571)270-1828. The examiner can normally be reached on Monday - Thursday (5:30 - 4:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. M./  
Examiner, Art Unit 3629

/JOHN G. WEISS/  
Supervisory Patent Examiner, Art Unit 3629